

SEQUENCE LISTING

<110> NOVARTIS AG
NOVARTIS PHARMA GMBH

<120> OCULAR GENE THERAPY

<130> 116566-010

<140> PCT/EP03/09497
<141> 2003-08-27

<150> 60/406,470
<151> 2002-08-28

<160> 25

<170> PatentIn Ver. 3.3

<210> 1
<211> 183
<212> PRT
<213> Homo sapiens

<400> 1
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Ser Pro Leu Ser Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln
20 25 30
Cys Phe Gln Gln Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala
35 40 45
Phe Leu Ser Ser Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala
50 55 60
Asp Arg Ala Ala Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe
65 70 75 80
Pro Ser Trp Glu Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro
85 90 95
Gly Ala Arg Ile Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro
100 105 110
Thr Trp Pro Gln Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg
115 120 125
Arg Leu Thr Glu Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser
130 135 140
Ala Thr Gly Gln Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln
145 150 155 160
Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn
165 170 175

Ser Phe Met Thr Ala Ser Lys
180

<210> 2
<211> 551
<212> DNA
<213> Homo sapiens

<400> 2
acagccaccg cgacttccag ccgggtgctcc acctggttgc gctcaacagc cccctgtcag 60
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ggctggcgaa caccttcgc gccttccgt cctcgccct gcaggacatcg tacagcatcg 180
tgccgcgtgc cgaccgcgc gccgtgcca tctgtcaaccc caaggacgag ctgctgtttc 240
ccagctggaa ggctctgttc tcaggctctg agggtccgct gaagccccggg gcacgcatact 300
tctctttga cggcaaggac gtccctgaggc accccacctg gccccagaag agegtgtggc 360
atggctcggaa ccccaacggg cgccaggctga ccgagagacta ctgtgagacg tggcggacgg 420
aggctccctc gggcacgggc caggccctct cgctgctggg gggcaggctc ctggggcaga 480
gtgccgcgag ctgccatcac gcctacatcg tgctctgcat tgagaacagc ttcatgactg 540
cctccaagta g 551

<210> 3
<211> 207
<212> PRT
<213> Mus musculus

<400> 3
Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1 5 10 15

Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val
20 25 30

Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly
35 40 45

Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly
50 55 60

Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu
65 70 75 80

Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn
85 90 95

Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly
100 105 110

Ser Gln Gly Gln Leu Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly
115 120 125

Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His
130 135 140

Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr
145 150 155 160

Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu
 165 170 175

Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr
 180 185 190

Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys
 195 200 205

<210> 4
<211> 624
<212> DNA
<213> Mus musculus

<400> 4
atggagac ag acacactcct gctatggta ctgctgctct gggttccagg ttccactgg 60
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ccccctgtctg gaggcatgcg tggtatccgt ggagcagatt tccagtgc tt ccagcaagcc 180
cgagccgtgg ggctgtcggg caccttcggg gcttcctgt cctctaggct gcaggatctc 240
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gtgctatctc ccagctggga ctccctgttt tctggctccc agggctaagt gcaaccggg 360
gcccgcatct tttcttttga cggcagagat gtccctgagac acccagcctg gccgcagaag 420
agcgtatggc acggctcggg ccccagtggg cggaggctga tggagagtt ctgtgagaca 480
tggcgaactg aaactactgg ggctacaggt caggcctcct ccctgctg tc aggaggctc 540
ctggaacaga aagctgcgag ctgccacaac agctacatcg tcctgtgcat tgagaatagc 600
ttcatgacct ctttctccaa atag 624

<210> 5
<211> 8
<212> PRT
<213> Homo sapiens

<400> 5
Ala Pro Gln Gln Glu Ala Leu Ala
1 5

<210> 6
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 6
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<210> 7
<211> 32
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 7
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<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 8
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<210> 9
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 9
ctgatgagta tggccgcgt caccagtgg                29

<210> 10
<211> 32
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<220>
<223> Description of Artificial Sequence: Synthetic
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<210> 11
<211> 35
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<220>
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<400> 11
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<210> 12
<211> 30
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<220>
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<210> 13
<211> 18
<212> PRT
<213> Adenovirus

<400> 13
Met Arg Tyr Met Ile Leu Gly Leu Leu Ala Leu Ala Ala Val Cys Ser
 1           5           10          15

Ala Ala

<210> 14
<211> 96
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 14
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agcgccggccc atactcatac tcatcaggac tttcag                                96

<210> 15
<211> 29
<212> DNA
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<400> 15
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<210> 16
<211> 29
<212> DNA
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<220>
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<210> 17
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 17
tttttttttc agtgtaaaag gtc                                         23

<210> 18
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 18
cagatgacat cctggccag                                              19

<210> 19
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
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<400> 19
ctatacagga aagtatggca gc                                            22

<210> 20
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<220>
<223> Description of Artificial Sequence: Synthetic
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cagcccctca gcaagaagcg ctgcgtcaca gccaccgcga cttccagccg gtgctcca 118

<210> 21
<211> 123
<212> DNA
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<223> Description of Artificial Sequence: Synthetic
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<400> 21
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ctgccagagc cctcccgcc aggcaaagga gaaagaagat ccaggccctc atggaagctt 120
                               123
      ggc

<210> 22
<211> 28
<212> DNA
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<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 22
gcgcatgtcg acagaatatg ggccaaac                                         28

<210> 23
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 23
gcgcatactgc agagctaattg agctacac                                         28

<210> 24
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 24
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27

<210> 25
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 25
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27